

Message

From: Harrison, Jennifer [Harrison.Jennifer@epa.gov]
Sent: 3/4/2019 7:05:47 PM
To: Wardell, Christopher [Wardell.Christopher@epa.gov]
Subject: Re: Quo Vadis Butte Health Study

Thanks

On Mar 4, 2019, at 8:26 AM, Wardell, Christopher <Wardell.Christopher@epa.gov> wrote:

FYI if Doug or others inquire about following up with Dr Ray.

Chris Wardell
U.S. EPA Region 8
303-312-6062
wardell.christopher@epa.gov

Begin forwarded message:

From: "Greene, Nikia" <Greene.Nikia@epa.gov>
Date: March 4, 2019 at 7:47:33 AM MST
To: "Wardell, Christopher" <Wardell.Christopher@epa.gov>
Cc: "Partridge, Charles" <Partridge.Charles@epa.gov>, "Vranka, Joe" <vranka.joe@epa.gov>, "Barker, Jacqui" <barker.jacqui@epa.gov>
Subject: RE: Quo Vadis Butte Health Study

Ok, its all set up John Ray will meet us at Great Harvest Bakery at 4pm Thursday March 14th.

Nikia Greene
Remedial Project Manager
U.S. EPA, Region 8
(406)-457-5019
greenes.nikia@epa.gov

From: Wardell, Christopher
Sent: Monday, March 04, 2019 7:42 AM
To: Greene, Nikia <Greene.Nikia@epa.gov>
Cc: Partridge, Charles <Partridge.Charles@epa.gov>; Vranka, Joe <vranka.joe@epa.gov>; Barker, Jacqui <barker.jacqui@epa.gov>
Subject: Re: Quo Vadis Butte Health Study

Sounds good. Thanks.

Chris Wardell
U.S. EPA Region 8
303-312-6062
wardell.christopher@epa.gov

On Mar 4, 2019, at 7:40 AM, Greene, Nikia <Greene.Nikia@epa.gov> wrote:

I will shoot for Thursday afternoon then, before the CTEC meeting.

Nikia Greene
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greene.nikia@epa.gov

From: Wardell, Christopher
Sent: Monday, March 04, 2019 7:39 AM
To: Greene, Nikia <Greene.Nikia@epa.gov>
Cc: Partridge, Charles <Partridge.Charles@epa.gov>; Vranka, Joe <vranka.joe@epa.gov>; Barker, Jacqui <barker.jacqui@epa.gov>
Subject: Re: Quo Vadis Butte Health Study

Anytime that works for you next week outside of Monday as I will be traveling up there. Thanks.

Chris Wardell
U.S. EPA Region 8
303-312-6062
wardell.christopher@epa.gov

On Mar 4, 2019, at 7:32 AM, Greene, Nikia <Greene.Nikia@epa.gov> wrote:

Yes, that sounds good to me. Let me know what time and day works for you and I will give him a call.

Nikia Greene
Remedial Project Manager
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greene.nikia@epa.gov

From: Wardell, Christopher
Sent: Monday, March 04, 2019 7:27 AM
To: Greene, Nikia <Greene.Nikia@epa.gov>
Cc: Partridge, Charles <Partridge.Charles@epa.gov>; Vranka, Joe <vranka.joe@epa.gov>; Barker, Jacqui <barker.jacqui@epa.gov>
Subject: Re: Quo Vadis Butte Health Study

Do you want to schedule a sit down with him sometime next week when we are all up there? I can as well, it might be good for him to here from our time and the constraints on some of his questions/demands.

Chris Wardell
U.S. EPA Region 8
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wardell.christopher@epa.gov

On Mar 4, 2019, at 6:57 AM, Greene, Nikia
<Greene.Nikia@epa.gov> wrote:

Hey Charlie,

How is it coming with the draft response? Dr. Ray is getting out ahead of us. I can give him a call and set up a sit down if that's what the team wants to do?

Nikia Greene
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greene.nikia@epa.gov

From: John Ray
<bodinman2003@yahoo.com>
Sent: Sunday, March 03, 2019 8:24 AM
To: Benevento, Douglas
<benevento.douglas@epa.gov>;
Hestmark, Martin
<Hestmark.Martin@epa.gov>; Bohan,
Suzanne <bohan.suzanne@epa.gov>;
Mutter, Andrew
<mutter.andrew@epa.gov>; Wardell,
Christopher
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Greene, Nikia
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<Elsen.Henry@epa.gov>; Archer, Allie
<Archer.Allie@epa.gov>
Cc: John Ray
<bodinman2003@yahoo.com>; Eric
Hassler <ehassler@bsb.mt.gov>;
Bryson, Josh <josh.bryson@bp.com>;
Partridge, Charles
<Partridge.Charles@epa.gov>; Patricia
A. Gallery <patricia.gallery@bp.com>;
Rosalind A. Schoof
<rschoof@ramboll.com>; Katie Hailer
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Burmeister
<loren.burmeister@bp.com>;
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Subject: Quo Vadis Butte Health Study

I would like to submit the following additional comments to you about the Butte Health Study. These comments were prompted by the article in the March 2, Montana Standard entitled "Study Shows Health Fears" by Susan Dunlap.
Dr. John W. Ray

An article in the March 2 *Montana Standard* entitled "Study Shows Health Fears" by Susan Dunlap further supports my call for clarity vis a vis the Butte Health Study. The focus of this study was the INBRE supported survey of local attitudes in Butte about public health with a particular emphasis on environmental factors such as the toxics of concern in Butte. The principal investigators were Bill McGregor and Raja Nagisetty and students from Montana Tech. One result of the survey is that it is obvious that those who responded to the survey question, to simplify, the efficacy of the Superfund cleanup in Butte with regard to protecting Butte residents from cancers that can be caused by exposure to the toxics of concern in Butte. The public perception is that Butte has a higher cancer rate than does the nation and that the cause of this higher cancer rate is

exposure to the toxics left behind by past mining in Butte which is the target of the Superfund cleanup. Superfund, in part, is supposed to mitigate the health risks associated with exposure to these toxics of concern.

My point is not to discuss whether or not citizen health fears are well founded. My point is not to discuss whether the sample in the McGregor/Nagisetty survey was large enough to accurately portray citizen concern. (As was stated in the article, for example, low-income citizens were not adequately represented in the survey nor were younger citizens. The survey over-represented older Butte residents.) My point is that what we have here, in the words of the Captain in the movie *Cool Hand Luke*, is a failure to communicate. We have here problematic health risk communication. No wonder that there is misperception and confusion—there are so many conflicting studies out there that reach different and sometimes opposite conclusions regarding whether or not Superfund has worked to protect public health.

My perception is that the current health study is exacerbating that confusion. The penchant for secrecy displayed by the Butte Health Study group does not help to either inform the public or lead to public trust in the process. The Superfund mandated Butte Health study lacks a clearly articulated focus and methodology and goal. For example, will it be simply a data analysis of lead levels in children or will it have a broader focus to consider all age groups, toxics other than lead, and diseases other than cancer. Nobody knows what the scope will be. It is unclear how it will be used. Public accountability and input has been spotty at best. There is a dearth of progress reports and updates to the public.

As I said in an earlier email, it is time *to clear the air*.

I reiterate my call for the following:

I am asking EPA to provide a clear statement as to the scope, focus and methodology of the Butte Health Study. I renew this call after the reading about the preliminary conclusions that the INBRE supported study reached. I am

**asking that EPA clearly
articulate answers to these
questions:**

1. Will the Health Study look at blood lead levels in populations other than children, i.e. older citizens? If so, what age levels?
2. Will diseases linked to the toxics of concern in Butte other than cancer be considered?
3. Will mercury and arsenic be considered?
4. Will EPA and support agencies make an attempt to clarify the conflicting health reports that have already been released and have led to public confusion about whether or not Butte is safe? By that I mean:
Will EPA provide a summary of all the studies and data, fairly characterize their focus, what they do and don't say, what perspectives do these various studies take, what are the strengths and weakness of the data set they use, what are the strengths and weaknesses of the methodological approach of each study,

are there any conclusions that can be ascertained that all the various studies would support? If EPA will not do this synthesis of studies, who will? The public cannot be left in a state of total confusion. Who has lead responsibility? Will the Health Study encompass the Greeley Neighborhood?

5. Will the Health Study have just a Superfund focus? Will the health impact of current mining activity be considered?
6. Will attention be given by the Health Study to the differential effects of exposure to the toxics of concern on low-income citizens in Butte? This is an environmental justice issue. How will the environmental justice community in Butte be a focus of the study?
7. Will the Health Study look at dioxin at the Pole Plant? Any study that does not is seriously incomplete and flawed.

I would offer the following recommendations:

1. Open up the process of conducting the Health Study to full public view and input, i.e. be transparent. It is not enough to have the occasional public meeting where no focus or guidance to the discussion is provided.
2. Consider more than blood lead levels in children. Look at other age groups. Look at other toxics of concern including arsenic and mercury. Look at diseases other than cancer that are related to the toxics of concern in Butte.
3. Consider the differential effects of exposure to the toxics of concern on low-income citizens living in the BPSOU; this is an environmental justice issue. In connection with the Study, don't rely on cancer or tumor registries for information about the environmental justice community in Butte for these approaches underrepresent low-income citizens who do not have the same level of access to health care as the non-poor.

4. Expand the focus beyond the BPSOU to include the Greeley Neighborhood that is, after all, adjacent to the BPSOU.
5. Provide a summary of all the studies and data, fairly characterize their focus, what they do and don't say, what perspective they take, what are the strengths and weakness of the data set they use, what are the strengths and weaknesses of each study, what questions do they answer and what questions do they leave unanswered.
6. Any health study that does not consider the health effects of the toxics of concern at the Pole Plant would be seriously incomplete.

The final issue to address is what will be done if the general consensus of informed opinion regarding the public health of Butte as it relates to Superfund is that: Superfund has NOT been as effective in protecting the public's health from the threats posed by exposure to the toxics of concern on the Butte Hill as it should

have been? Another way of putting this is: What will happen if the conclusions of the preponderance of peer reviewed, published health studies related to cancer incidence in Butte warrants the conclusion that Superfund has not been effective? What changes in the Superfund cleanup will be made? Such a finding of the lack of efficacy in the Superfund cleanup is of course a possibility. Maybe we will find that the public perception about efficacy problems with the Superfund cleanup is correct. Then what? (This health study is a waste of time if it cannot potentially affect the cleanup on the ground.) What if meeting the current action levels for the toxics of concern proves to be non-protective? What if ARARs are met and adverse effects from exposure to the toxics of concern continue? What will be done differently? Obviously, if performing certain actions are not accomplishing what the actions were designed to accomplish, continuing to perform the same

actions in the hope that different results will accrue is, by definition, insanity. I am not saying that a lack of efficacy will be the finding when all is said and done. I am saying that there needs to be a comprehensive, thorough, unbiased and methodologically sound investigation of the topic as to whether or not Superfund has been effective in protecting the public's health. Simply, attacking studies that show results that are not wanted will not do.

Obfuscation and secrecy and confusion need to be replaced by clarity, openness and order when it comes to the Superfund mandated Health Study.